Appendix A

AMENDMENTS

In the Claims

1–12.   (Cancelled)

13.   (**Currently Amended**) A method for propagating information in a network**, the method** comprising:

    automatically assigning an index number to an interface **of a circuit switch, wherein said circuit switch is configured to be communicatively coupled to a router**;

    automatically transmitting said index number using said interface, wherein

        said automatically transmitting said index number using said interface uses a packet routing protocol**, and**

        said router is configured to communicate using said packet routing protocol; and

    automatically transmitting said index number using at least one additional interface **of said circuit switch**, wherein

        said automatically transmitting said index number using said at least one additional interface uses said packet routing protocol,

        said interface and said one additional interface are interfaces among a plurality of interfaces of [[a]] **said** circuit switch,

        said interface is configured to be coupled to a link,

        said circuit switch is configured to store a table, and

        said table comprises

            an entry indicating said index number,

            an entry indicating a function of said link, and

            an entry indicating a predetermined number of contiguous frames that may be transmitted over said link.

14.   (Previously Presented) The method of claim 13 further comprising automatically transmitting said index number on all enabled interfaces of said circuit switch.

15.   (Original) The method of claim 13 wherein said interface and said one additional interface conform to a protocol selected from a group consisting of Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH).

16.   (Previously Presented) The method of claim 13 further comprising:
storing said index number in said table, wherein
>   at least another network element in said network is configured to store said index
>>   number in another table.

17.   (Previously Presented) A network comprising:
a first router;
a first circuit switch comprising a first interface, wherein
>   said first circuit switch is communicatively coupled to said first router,
>   said first circuit switch comprises a first plurality of memory locations, and
>   said first interface having assigned thereto a first identifier;
a second router;
a second circuit switch comprising a second interface, wherein
>   said second circuit switch is communicatively coupled to said second router,
>   said second circuit switch comprises a second plurality of memory locations,
>   said second interface having assigned thereto a second identifier,
>   said first plurality of memory locations store a first table,
>   said first table comprises each of said first identifier and said second identifier,
>   said second plurality of memory locations store a second table, and
>   said second table comprises each of said first identifier and said second identifier,
>>   and
>   said first circuit switch and said second circuit switch are configured to
>>   communicate using a packet routing protocol; and
a link coupling said first interface to said second interface, wherein
>   said first table and said second table each comprise
>>   an entry indicating a function of said link, and

an entry indicating a predetermined number of contiguous frames that may be transmitted over said link.

18.   (Previously Presented) The network of claim 17 wherein said link comprises a fiber optic cable.

19.   (Original) The network of claim 17 wherein said first circuit switch and said second circuit switch use a protocol selected from a group consisting of Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH).

20-26. (Cancelled)

27.   (**Currently Amended**) ~~An article of manufacture~~ **A computer program product** comprising:

    ~~a computer readable storage medium comprising a computer readable program code for propagating information in a network, said computer readable program code in said article of manufacture further~~ **a plurality of instructions,** comprising

    ~~computer readable program code for automatically assigning~~ **a first set of instructions, executable on a computer system, configured to automatically assign** an index number to an interface[[;]] **of a circuit switch, wherein**

    said circuit switch is configured to be communicatively coupled to a router,

    ~~computer readable program code for automatically transmitting~~ **a second set of instructions, executable on said computer system, configured to automatically transmit** said index number on said interface, wherein said ~~computer readable program code for automatically transmitting said index number on said interface~~ **second set of instructions** is configured to use a packet routing protocol[[;]] **,** and

    said router is configured to communicate using said packet routing protocol, and

~~computer readable program code for automatically transmitting~~ **a third set of instructions, executable on said computer system, configured to automatically transmit** said index number on at least one additional interface **of said circuit switch**, wherein

said computer readable program code for automatically transmitting said index number on said at least one additional interface is configured to use said packet routing protocol,

said interface and said one additional interface are interfaces among a plurality of interfaces of [[a]] **said** circuit switch,

said interface is configured to be coupled to a link,

said circuit switch is configured to store a table, and

said table comprises

an entry indicating said index number,

an entry indicating a function of said link, and

an entry indicating a predetermined number of contiguous frames that may be transmitted over said link**; and**

a computer-readable storage medium, wherein said instructions are encoded in said computer-readable storage medium.

28.   (Previously Presented) The method of claim 13 wherein

said at least one additional interface is configured to be coupled to another link,

said circuit switch is configured to store another table, and

said another table comprises

another entry indicating a function of said link, and

another entry indicating a predetermined number of contiguous frames that may be transmitted over said another link.

29.   (**Currently Amended**)   The ~~article of manufacture~~ **computer program product** of claim 27 wherein

said at least one additional interface is configured to be coupled to another link,

said circuit switch is configured to store another table, and

said another table comprises

> another entry indicating a function of said link, and
>
> another entry indicating a predetermined number of contiguous frames that may
> > be transmitted over said another link.

30.   (Previously Presented)   The method of claim 13, wherein
said packet routing protocol is one of an Open Shortest Path First (OSPF) protocol and a
> Routing Information Protocol (RIP).

31.   (Previously Presented)   The method of claim 13, wherein
said link is configured to couple said interface to another interface in another circuit
> switch.

32.   (Previously Presented)   The method of claim 13, wherein said network
comprises a plurality of routers and a plurality of circuit switches, said circuit switches comprise
said circuit switch, and the method further comprises:

> transmitting said index number from a router of said routers in accordance with said
> > packet routing protocol, wherein
> >
> > said transmitting comprises said automatically transmitting said index number
> > > using said interface.

33.   (Previously Presented)   The method of claim 32, further comprising:
storing said index number in said table, wherein

> said transmitting transmits a packet from said router to another router of said
> > routers,
>
> a network element in said network comprises said circuit switch and said router,
>
> another network element in said network comprises another circuit switch of said
> > circuit switches and said another router, and
>
> said another network element is configured to store said index number in another
> > table.

34.   (Previously Presented)   The method of claim 33, further comprising:

segmenting said packet into a plurality of units at said network element,

forming a plurality of frames at said network element, wherein

each frame comprises at least one of said units;

reassembling said plurality of units into said packet at said another network element; and

storing said index number in said another table.

35. (Previously Presented) The method of claim 34, wherein

said link is coupled between said network element and said another network element,

said table and said another table each comprise information, and

said information indicates a predetermined number of contiguous frames that may be

transmitted over said link.

36. (**Currently Amended**) The ~~article of manufacture~~ **computer program product** of claim [[37]] **27**, wherein said network comprises a plurality of routers and a plurality of circuit switches, said circuit switches comprise said circuit switch, and said ~~computer readable program code in said article of manufacture~~ **instructions** further comprise[[s]]:

~~computer readable program code for transmitting~~ **a fourth set of instructions, executable on said computer system, configured to transmit** said index number from a router of said routers in accordance with said packet routing protocol~~, wherein~~

~~said computer readable program code for transmitting comprises said computer readable program code for automatically transmitting said index number using said interface~~.

37. (**Currently Amended**) The ~~article of manufacture~~ **computer program product** of claim 36, wherein said ~~computer readable program code in said article of manufacture~~ **instructions** further comprise[[s]]:

~~computer readable program code for storing~~ **a fifth set of instructions, executable on said computer system, configured to store** said index number in said table, wherein

said ~~computer readable program code for transmitting transmits~~ **fourth set**
of instructions are further configured to cause a packet **to be**
transmitted from said router to another router of said routers,

a network element in said network comprises said circuit switch and said router,

another network element in said network comprises another circuit switch of said
circuit switches and said another router, and

said another network element is configured to store said index number in another
table.

38.   (**Currently Amended**)   The ~~method~~ **computer program product** of claim
37, wherein said ~~computer readable program code in said article of manufacture~~
instructions further comprise[[s]]:

~~computer readable program code for segmenting~~ **a sixth set of instructions,**
executable on said computer system, configured to segment said packet into a
plurality of units at said network element,

~~computer readable program code for forming~~ **a seventh set of instructions,**
executable on said computer system, configured to form a plurality of frames
at said network element, wherein
each frame comprises at least one of said units;

~~computer readable program code for reassembling~~ **a eighth set of instructions,**
executable on said computer system, configured to reassemble said plurality
of units into said packet at said another network element; and

~~computer readable program code for storing~~ **a ninth set of instructions, executable**
on said computer system, configured to store said index number in said another
table.

39.   (**Currently Amended**)   The ~~article of manufacture~~ **computer program product** of claim 38, wherein

said link is coupled between said network element and said another network element,

said table and said another table each comprise information, and

said information indicates a predetermined number of contiguous frames that may be transmitted over said link.